What is claimed is:

1. A photomultiplier tube comprising:

a faceplate made from glass;

a side tube made from glass and having a hollow shape extending along a tube axis which is substantially perpendicular to the faceplate, the side tube being joined to one surface of the faceplate;

a photocathode formed on an inner region of the one surface of the faceplate in the side tube to emit a photoelectron in response to light incident on the faceplate;

an electron multiplying portion for multiplying the photoelectron emitted from the photocathode; and

an anode provided inside the side tube in correspondence with the photocathode for receiving an electron emitted from the electron multiplying portion, wherein

the electron multiplying portion includes:

a first dynode provided inside the side tube for multiplying the photoelectron impinging thereon from the photocathode to emit a secondary electron;

a second dynode placed at a substantially same tube axial position as a tube axial position of the first dynode inside the side tube, the second dynode multiplying the secondary electrons impinging thereon from the first dynode

to emit a secondary electron;

a plurality dynodes including a third and higher order dynodes, the plurality of dynodes being provided on a downstream side of the first and second dynodes in a tube axial direction inside the side tube for multiplying the secondary electrons impinging thereon from the second dynode in turn to emit secondary electrons; and

a focusing electrode having:

a flat plate provided between the second and third dynodes, the flat plate having an aperture that enables the third dynode to face the second dynode;

a first screen provided on a first dynode side of the aperture, the first screen extending across a lower end of the first dynode toward the photocathode; and

a second screen provided on a second dynode side of the aperture, the second screen extending towards the photocathode so that a front end thereof is positioned above a lower end of the second dynode.

2. The photomultiplier tube according to Claim 1, wherein the focusing electrode is maintained at a potential which is higher than a potential of the second dynode and lower than a potential of the third dynode.

3. A photomultiplier tube comprising:

a faceplate made from glass;

a side tube made from glass and having a hollow shape

extending along a tube axis which is substantially perpendicular to the faceplate, the side tube being joined to one surface of the faceplate;

a photocathode formed on an inner region of the one surface of the faceplate in the side tube to emit a photoelectron in response to light incident on the faceplate;

an electron multiplying portion for multiplying the photoelectron emitted from the photocathode; and

an anode provided inside the side tube in correspondence with the photocathode for receiving an electron emitted from the electron multiplying portion, wherein

the electron multiplying portion includes:

a first dynode provided inside the side tube for multiplying the photoelectron impinging thereon from the photocathode to emit a secondary electron;

a second dynode placed at a substantially same tube axial position as a tube axial position of the first dynode inside the side tube, the second dynode multiplying the secondary electrons impinging thereon from the first dynode to emit a secondary electron;

a plurality dynodes including a third and higher order dynodes, the plurality of dynodes being provided on a downstream side of the first and second dynodes in a tube

axial direction inside the side tube for multiplying the secondary electrons impinging thereon from the second dynode in turn to emit secondary electrons; and

a focusing electrode having:

a first screen formed on a lower end side of the first dynode and extending across a lower end of the first dynode toward the photocathode;

a flat plate having a cut-away portion that enables the third dynode to face the second dynode; and

a second screen provided at the cut-away portion on a lower end side of the second dynode, the second screen extending across a lower end of the second dynode towards the photocathode, the focusing electrode being secured between the second and third dynodes, thereby defining a space extending from the first dynode to the third dynode.

4. The photomultiplier tube according to Claim 3, wherein the focusing electrode is maintained at a potential which is higher than a potential of the second dynode and lower than a potential of the third dynode.

5. A photomultiplier tube comprising:

a faceplate made from glass;

a side tube made from glass and having a hollow shape extending along a tube axis which is substantially perpendicular to the faceplate, the side tube being joined

to one surface of the faceplate;

a photocathode formed on an inner region of the one surface of the faceplate in the side tube to emit a photoelectron in response to light incident on the faceplate;

an electron multiplying portion for multiplying the photoelectron emitted from the photocathode; and

an anode provided inside the side tube in correspondence with the photocathode for receiving an electron emitted from the electron multiplying portion, wherein

the electron multiplying portion includes:

a first dynode provided inside the side tube for multiplying the photoelectron impinging thereon from the photocathode to emit a secondary electron;

a second dynode placed at a substantially same tube axial position as a tube axial position of the first dynode inside the side tube, the second dynode multiplying the secondary electrons impinging thereon from the first dynode to emit a secondary electron;

a plurality dynodes including a third and higher order dynodes, the plurality of dynodes being provided on a downstream side of the first and second dynodes in a tube axial direction inside the side tube for multiplying the secondary electrons impinging thereon from the second dynode

in turn to emit secondary electrons; and

a focusing electrode having:

a first screen formed on a lower end side of the first dynode and extending across a lower end of the first dynode toward the photocathode;

a flat plate provided between the second and third dynodes, the flat plate having a first cut-away portion that enables the third dynode to face the second dynode and a second cut-away portion formed between the first and third dynodes; and

a second screen provided on a second dynode side of the first cut-away portion and extending across a lower end of the second dynode towards the photocathode.

6. The photomultiplier tube according to Claim 5, wherein the focusing electrode is maintained at a potential that is higher than a potential of the second dynode and lower than a potential of the third dynode.

7. A photomultiplier tube comprising:

a faceplate made from glass;

a side tube made from glass and having a hollow shape extending along a tube axis which is substantially perpendicular to the faceplate, the side tube being joined to one surface of the faceplate;

a photocathode formed on an inner region of the one surface of the faceplate in the side tube to emit a

photoelectron in response to light incident on the faceplate;

an electron multiplying portion for multiplying the photoelectron emitted from the photocathode; and

an anode provided inside the side tube in correspondence with the photocathode for receiving an electron emitted from the electron multiplying portion, wherein

the electron multiplying portion includes:

a first dynode provided inside the side tube for multiplying the photoelectron impinging thereon from the photocathode to emit a secondary electron;

a second dynode placed at a substantially same tube axial position as a tube axial position of the first dynode inside the side tube, the second dynode multiplying the secondary electrons impinging thereon from the first dynode to emit a secondary electron;

a plurality dynodes including a third and higher order dynodes, the plurality of dynodes being provided on a downstream side of the first and second dynodes in a tube axial direction inside the side tube for multiplying the secondary electrons impinging thereon from the second dynode in turn to emit secondary electrons; and

a first focusing electrode provided on a lower side of the first dynode and on an upper side of the third

dynode; and

a second focusing electrode provided on a lower side of the second dynode and on the upper side of the third dynode; and wherein

an electron multiplied by the second dynode travels in a space between the fist and second focusing electrodes to impinge on the third dynode.

8. The photomultiplier tube according to Claim 7, wherein the first focusing electrode is integral with the second focusing electrode.